

JP 360202956 A
OCT 1985

BEST AVAILABLE COPY

(54) CIRCUIT MODULE

(11) 60-202956 (A)

(43) 14.10.1985 (19) JP

(21) Appl. No. 59-58240

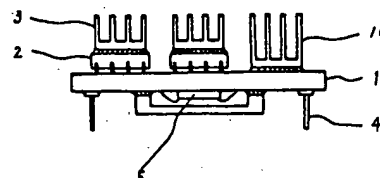
(22) 28.3.1984

(71) HITACHI SEISAKUSHO K.K. (72) BUNICHI TAGAMI(1)

(51) Int. Cl. H01L23/36

PURPOSE: To ensure the area of heat dissipation even when region on which parts are not loaded is generated by fitting a dummy radiator fin to a circuit module consisting of a plurality of semiconductor elements.

CONSTITUTION: Chip carriers 2 on which semiconductor integrated circuit elements are mounted are placed on a ceramic wiring substrate 1, and radiator fins are fitted to the chip carriers 2. Leads 4 connect signals and supply a power supply with electricity. Dummy fins 10 are loaded in place of parts, and heat generated in each element is mainly dissipated from the radiator fins 3, but one part transmits the wiring substrate 1 and is dissipated from the dummy fins 10.

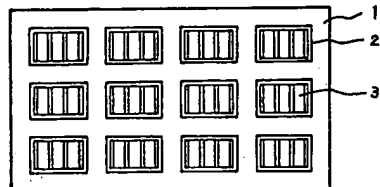


057/712

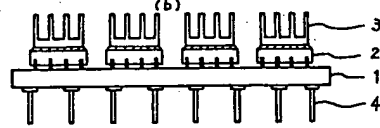
特開昭 60-202956(3)

第 1 圖

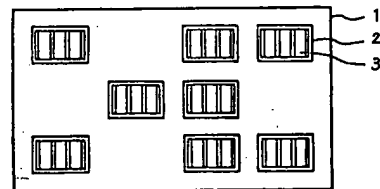
(a)



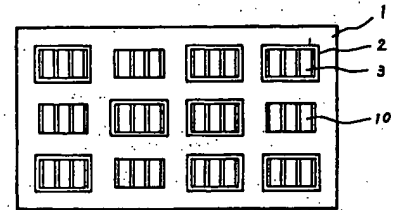
(b)



第 2 圖



第 3 圖



第 4 圖

